Restarting and Sustaining Growth and Development in Africa: A Framework for Improving Productivity

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Abstract

This report is one of a series. It looks at how improved productivity contributes to the overall task of restarting and sustaining growth and development. The factors that undermine productivity and the opportunities for making major improvements in productivity are discussed. The report comes to five main conclusions. First, macroeconomic stability and a predictable policy direction are essential to any attempt to foster sustained improvements in productivity. Second, productivity improvements cannot persist without the type of generalized capital accumulation associated with broad-based improvements in health, education, food security, and institutions that sustain social stability. Third, a major stimulus to both productivity and growth in Africa could be achieved relatively rapidly through concentrated efforts to reduce waste and inefficiency. An obvious place to start is the government's own operations. Fourth, there needs to be a renewed focus on improving management at all levels. A useful start has been made by liberalizing markets and opening African economies to competition. Finally, major sustained improvements in productivity would occur across Africa if governments began emphasizing the large untapped agriculture sector.

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1. Introduction

Structural adjustment and economic reform have dominated the policy agendas of most countries in sub-Saharan Africa (SSA) since the late 1970s. However, progress in both areas has been sporadic. Governments do not sustain the programs they adopt. Various degrees of backsliding occur, including the full reversal of policy reform (Bethelemy 1995; Lesink 1996; Stryker 1997).[1] Policy reversals have been exceedingly costly. While African governments have persistently emphasized the social, economic and political *costs of adjustment*, they have given scant attention to the costs of *not* adjusting. The most obvious cost in this category is continued economic decline.

The theme of this chapter is that for Africa's economic decline to be reversed, productivity has to be enhanced. I address three questions. First, how can African countries achieve the rapid increases in productivity needed to sustain growth and development if governments will not persevere with economic reform? Second, what policies and institutional changes are required to ensure that economic reform is sustained in ways that raise productivity? The third question is implied by the first two: whose decisions and actions will be required to ensure that the economic reforms needed for sustained improvements in productivity are implemented?

The chapter begins by providing a framework that links improved productivity and economic growth. It then examines the factors that hamper productivity improvements in Africa. This is followed by a discussion of the elements required to raise productivity on a sustained basis. Finally, I offer some concluding comments.

2. Productivity and Economic Growth

Productivity is defined as output per unit of input (Pearce 1989:343). Economic growth is defined as the sustained increase in real per capita income (Pearce 1989:120, 175).[2] The two are closely linked. Furthermore, they are both directly related to efficiency. Economic growth results from the combined effect of adding inputs (at constant productivity) and raising the productivity of those inputs. Improved productivity has virtuous connotations: more output can be obtained from a given combination of inputs. (Equivalently, a given level of output can be obtained using fewer inputs.)

The close connection between improved productivity and economic growth is commonly demonstrated using growth accounting techniques. These decompose the growth in per capita real income into the contribution of increased inputs and improvements in their productivity. By convention, the separate contributions are defined as the *sources* of economic growth.

The concepts are clear, but disentangling their effects can be difficult. Productivity gains typically emerge from advances in technology, changes in organization, and new knowledge (or new applications of existing knowledge). These improvements are embodied in new inputs or modifications to existing inputs. Measurement problems pervade the whole analysis. Yet, despite the fuzziness, it is important to distinguish between the separate effects. Policy makers, in

particular, need to understand whether the principal stimulus to economic growth is the rapid accumulation of inputs or improved productivity. This was illustrated by the controversy that emerged over the sources of the 'East Asia miracle.' Krugman (1994), for instance, argued that the principal source of Asia's high growth rates was the rapid accumulation of inputs rather than sustained increases in productivity. Others dispute this conclusion (Radelet and Sachs 1998).

The motivation for expanding input use or improving productivity varies in both the short and long term. Decisions to add inputs depend on input supply, relative prices, the expectation of changes in product prices, and incentives for capacity expansion. Decisions about improving productivity are influenced by relative price changes, perceptions of competitive pressure, opportunities for innovation, the willingness of decision makers to take risks, protection of property rights, and the availability of complementary inputs, particularly skilled labor. A further consideration is the degree to which the contribution of each source of growth guides decisions about the potential value of complementary investments. For example, if the main impetus to growth is the increased use of inputs, infrastructure will need to expand so as to accommodate the movement of those inputs. However, if the basic source of growth is improved productivity, the pressure on existing infrastructure may not intensify rapidly. There will be increases in demand for resources that support the activities that raise productivity, such as R&D. A practical illustration is that before the oil shock of the mid 1970s, the use of petroleum and electricity in the developed countries was expected to double every 8 to 10 years. As the price of these energy resources rose, there was a sharp rise in R&D related to energy conservation that dramatically increased energy efficiency. The consequent reduction in energy use per unit of GDP led the major utilities to shelve plans for expanding energy infrastructure.

Countries in the process of promoting economic reform need to determine how both sources can make a more comprehensive and enduring impact on economic growth. In an African context, governments typically face serious resource constraints. Most countries have been attempting to recover against a background of exceedingly high levels of external and internal debt (including arrears), chronic budget deficits, loss-making state-owned enterprises (SOEs), low private savings, flourishing parallel markets in resources with controlled prices, capital flight, and widespread currency substitution. These difficulties have been compounded by the shortage of skilled personnel with the capacities to adapt in ways that raise productivity. For a growing number of countries, personnel capacity has been seriously eroded by the losses due to HIV/AIDS. Furthermore, given the history of policy reversal and economic disruption, few local or foreign investors have been willing to "take the plunge."[3] This has dampened any potential improvement in productivity.

Notwithstanding these disadvantages, important improvements could occur, particularly in the short and medium terms. Most African countries have large amounts of labor and land that are under-utilized because of inappropriate policies.[4] Many industrial operations (private and public) have large margins of unutilized capacity that could be profitably employed through better organization and management. Finally, many personnel and much materiel in the public sector are used ineffectively. Thus, productivity could often be significantly enhanced through the selective

removal of slack, the reduction in waste, and by re-organization (Hilderbrand and Grindle 1997). However, making such improvements requires a setting that encourages change.

a. Historical Background

The literature on the determinants of productivity and economic growth is both rich and voluminous.[5] The classical economists – Smith, Ricardo, Marx, and Mill – emphasized these topics. For them, economic growth depended on the accumulation of capital, the expansion of the extent of the market, the growth of the labor force, improvements in technology, and organizational changes (such as the division of labor). Seen in modern terms, these scholars focused on elements that increased the supply of inputs and raised their productivity.

The neoclassical economists were less concerned with growth. In the latter part of the nineteenth century, European economies had experienced unprecedented rates of expansion, even if punctuated by the occasional panic. Notwithstanding the gloomy predictions by Marx about the demise of capitalism, the expansion was widely expected to continue (Arndt 1987). Accordingly, mainstream neoclassical economists – Menger, Pareto, Walras, and Marshall – concentrated on the role of markets in the economy, how resources were allocated, and the types of institutions needed for market economies to reach equilibrium and remain there.

Modern formal analyses of economic growth began with Joseph Schumpeter's *Theory of Economic Development* first published in 1912. Schumpeter highlighted the role of entrepreneurs whose adoption of technological innovations helped raise output, income, and employment. He described a process of “creative destruction” whereby new technologies displaced old. Ongoing activities either adapted to the changing cost pressures or declined. Deane (1965) has an illuminating discussion of this process in the development of the UK. In the early phases of the industrial revolution, the canal system dramatically lowered transport costs. Over time, barge traffic was largely displaced by the railways. These, in turn, faced stiff competition when motor vehicles were introduced. Some industries readily adapted to the new technology. For example, railway coach makers shifted to the manufacture of automobile bodies. Other industries did not adapt. Steam power, for instance, was largely displaced by internal combustion engines and electricity.

Other explanations of growth followed. Ramsey (1928) highlighted the central role of savings in growth. His contribution became the intellectual foundation for theories of optimal economic growth. Harrod (1939) and Domar (1946), in separate contributions, developed dynamic versions of Keynes’ theory of income determination (Keynes 1936). A key element in this theory is investment.

Leontief's input-output (or inter-industry) model of an economy provided analysts with a mechanism for examining the inter-sectoral linkages between gross output, final demand, and inter-industry purchases and deliveries (Leontief 1944).By assuming fixed coefficients, the model yields large amounts of detail. But this assumption automatically excludes productivity

improvements. These were incorporated later with the formulation and application of dynamic input-output models (Bruno *et al* 1970; McPherson 1980).

The neoclassical growth model, developed by Solow (1956) and Swan (1956), provided a major breakthrough in measuring productivity change. It used the neoclassical production function to link output to the principal factors of production (labor and capital). The residual, derived as the difference between the growth of real per capita output and the weighted contribution of the factor inputs, provided an estimate of total factor productivity.[6]

As the ability of scholars to measure the contribution of various factors to economic growth improved, they increasingly began to distinguish both the benefits and costs of changes in growth and productivity. All economic processes generate both 'goods' (benefits) and 'bads' (costs). The benefits of economic growth were obvious and widely recognized. They included the greater capacity of a society to produce goods and services, an increase in consumer choice, improved physical amenities, food security, broader educational opportunities, better health and nutrition, and enhanced physical and social mobility.[7]

As a counterpoint to these benefits, a large number of costs have been identified. Indeed, some exceedingly harsh social criticism has emerged in the wake of the dislocations that accompanied rapid industrialization (Myrdal 1968, 1970; Seers 1972; Fishlow *et al.* 1978; enda 1990; Mishen 1993; Streeten 1994). Some of these changes include environmental degradation, the depletion of non-renewable resources, regional imbalances that promote rapid rural-urban migration and, especially in low-income countries, the proliferation of urban slums lacking basic social amenities and physical infrastructure. Other costs, particularly in Africa, have been the emergence of large numbers of poorly educated, low-income workers, detached from the land but unable to find employment in the formal, urban, economy (World Bank 1995). Women have been most seriously affected because they do not have access to the resources and opportunities that would improve their economic positions, enhance their security, and begin to overcome the conditions that transfer poverty and inequality across generations.

These and other developments, especially in the late 1960s and early 1970s, raised serious doubts about the very basis of post-WWII growth and the productivity improvements that supported it. Responding to the images created by Rachel Carson's *Silent Spring* (reprinted in 1994); the Paddock brothers' (1975) projection of devastating famine; Hardin's tragedy of the commons (1968); Ehrlich's population bomb (1970); Meadows *et al.'s* work on the limits to growth (1974); and Brown's lily pond in *The Twenty-Ninth Day* (1978), academics and practitioners began searching for alternative growth paths.[8] Stimulated by Ward and Dubos' description of "only one world," increasing numbers of specialists turned their attention to the issue of sustainable development (Solow 1992; Taylor 1996; Vincent and Panayotou 1997; Sachs 1997).[9] Although concepts of sustainability continue to be debated, the degree of urgency has increased with the attention given to global warming, habitat loss, and other environmental issues in the wake of the international conferences at Rio de Janeiro (1992) and Kyoto (1997). To these matters has been added the potential problems arising from looming water shortages in many heavily populated areas (Leslie 2000). Attention is being increasingly directed to the types of incentives required to

preserve (and potentially augment) natural (and other) resources that provide the foundation for long-term improvements in productivity and growth.

Since the mid-1980s, endogenous growth models have been used to incorporate the dynamic effects of changes in savings and investment on factor supplies and productivity. An important area of emphasis is the relationship between technological change and the rate of investment (Lucas 1988; Romer 1996).[10] The endogenous element in these models derives from the way that changing incentives influence savings and investment and lead to permanent changes in the rate of growth.[11]

Other analysts have focused on the problems of attempting to achieve sustained growth when some key resources are non-renewable. This stimulated interest in 'zero growth.' Up to the early 1970s, the idea was seriously discussed, particularly in view of the triage and other scenarios raised by Meadows *et al.* noted above. The interest in zero growth was a natural extension. The idea was dropped as it became clear that maintaining growth at or around a rate of zero would require some exceedingly broad-based and sophisticated technological change, most of which could not occur without sustained economic growth.[12]

Finally, some analysts have run the endogenous growth models in reverse as a means of accounting for patterns of retrogression and economic decline across Africa. One approach has been to make the rate of saving a function of corruption. Such a negative relationship reflects how the increase in rent seeking and decline in accountability or, more generally, the lack of governance, reduces national savings. These models yield a variety of time paths of declining income directly linked to the reduction in savings and investment and diminishing productivity (McPherson and Zinnes 1991, 1992). Recent work by McPherson, Hoover, and Snodgrass (2000) uses the same framework to examine the impact of HIV/AIDS on economic growth in southern Africa. The losses of skills, work time, and intangibles (such as declining morale) systematically (and endogenously) undermine productivity. This reduces the capacity for growth and economic recovery in many African countries.

On this latter point, it is now clear that widely-used projection models related to the HIV/AIDS in Africa ignored the non-linear growth effects as the epidemic spreads. This is evident in the large number of projection models (ING Barings 2000) showing that HIV/AIDS will not result in large future losses of growth even under circumstances where the adult HIV-prevalence rate exceeds 25 percent. These models systematically understate the structural implications of the loss of skills and decline in productivity that occurs as the prevalence of HIV/AIDS rises.

b. Growth Accounting

Understanding the factors that contribute to improved productivity and economic growth is one thing; measuring their effects is another. This has been achieved in stages. The specification by Cobb and Douglas of their well-known production function in 1928 led to a large amount of research on the contribution to output of changes in relative factor shares.[13] These analyses were generally restricted by the lack of suitable macroeconomic data.

In the early 1940s, Colin Clark applied statistical techniques to examine the factors responsible for the growth of employment. Using time series that covered long periods, he pioneered the effort to identify the contribution of the several causal factors. Another pioneer was Kuznets who used cross-country averages in key macroeconomic ratios to determine whether and how these ratios change over time as economies underwent modern economic growth.[14]

Two types of techniques were developed to enable economists to measure the contribution of factors affecting the growth of output. Leontief's (1944) input-output approach was used to trace the effects on output of changes in inter-industry flows, final demand and imports. Solow (1956) used the neoclassical production function to allocate statistically the contribution to growth of changes in selected measurable inputs.

The input-output approach provided a large degree of detail but was mechanistic and excluded any feedback to resource use from changes in relative prices.[15] The neoclassical model provided econometric estimates of the relationship between the growth of output and the growth of inputs. Price effects were directly incorporated through estimates of relative factor shares (Solow 1956; Denison 1962).

Dramatic improvements in data availability and computational power have made decomposition analyses commonplace. Over recent years, a large amount of research has been devoted to identifying the empirical determinants of growth from samples that often include more than 100 countries. These studies test hypotheses related to the convergence of per capita income levels over time, and identifying the sources of regional differences in growth rates. They are based on a far richer set of factors – economic, political, demographic, geographic, and institutional – than had previously been considered.[16]

The downside is that such large data sets have turned much of the growth accounting work into a data-mining exercise. Careful analysis of the structural features that link the variables has often been shunted aside while analysts produce single equation growth regressions with 15 to 20 right hand variables (Sachs and Warner 1997; Easterly and Levine 1997; Calimitsis, Basu and Ghura 1999; Barro 1999). The fundamental problem with this approach is that, over the period examined in these models (typically more than two decades) income growth is, itself, a determinant, through feedback and joint-dependence with other variables, of income growth. The implications of not allowing for this point can be serious. These points are elaborated and illustrated the cross-country growth model presented in Chapter 11.

c. Growth Processes

The Classical economists, particularly Ricardo and Mill, examined the direct contribution to the growth of income of the main factors of production: land, labor, and capital. Their discussion also highlighted sources of productivity growth. The pin factory described by Adam Smith (1776) is the most famous example of the gains from improved techniques (including organization). More modern treatments of growth and productivity have tended to shift the focus from inputs and how

they are combined to the *processes* by which the various factors contribute to growth and productivity. For example, Kuznets (1966) argued that the application of modern science and technology generated systematic changes in the spatial utilization of the labor force (urbanization), the pattern of production (industrialization), and the growth and structure of the population (the demographic transition).

Increasing factor productivity was largely associated with the accumulation of capital and the new technology that it embodied.[17] The relocation of labor from agriculture to industry raised average incomes and increased the demand for the output of the emerging industrial sector. It also led to improved management and structures (e.g., limited liability companies) that, in turn, helped spread risk and raise productivity. Urbanization, which accompanied the industrial expansion, substantially increased the returns from investing in human capital, as well as the opportunity cost of bearing and raising children. As a result, population growth rates declined, raising the stock of capital per worker, further boosting productivity.

Advances in science and technology have made these processes self-reinforcing and largely self-perpetuating. They have been complemented by public investment in social and physical capital. Public investments in basic education, sanitation, drainage, storage, agricultural research, and preventive medicine have greatly improved the knowledge base, food security and health status of the population. Moreover, the expansion of infrastructure – roads, bridges, ports, railways, and telecommunications – and enhancements in the legal, regulatory, and judicial systems have stimulated the rapid expansion of industry and commerce.[18]

As more data became available, especially for the developing countries, Chenery and his co-workers began to disentangle more precisely how these processes were related to economic growth. They emphasized three changes. The first was the *increase in productive capacity* through the accumulation of physical and human capital. The second was the *transformation of resource use* through changes in demand, trade flows, and substitution within production and among factor inputs. And the third was *socioeconomic changes* such as urbanization, the demographic transition, and shifts in the distribution of income (Chenery and Syrquin 1975; Chenery 1979; Syrquin and Chenery 1989). All of these changes modified the context within which growth and productivity improvement occurred.

Viewed in broad terms, these studies reinforced the view that economic growth and productivity improvements resulted from a "generalized process of capital accumulation" (Johnson 1964) where capital is defined to include physical, social, human, and intellectual dimensions of productive capacity.[19] This generalized process has led to a steady rise in labor productivity that, in the view of some analysts, is the single most important feature in every country that has made significant economic progress (de Long and Summers 1991; Krugman 1992; Kremer 1993; Gould and Ruffin 1993; de Long 1997; Johnson 2000). As analysts seek more inclusive explanations of the processes responsible for economic growth, some of the changes involved are being reinterpreted. For instance, the recent focus on institutional development has led a number of economists to argue that economic growth proceeds from the broad-based and systematic

reduction in transaction costs (North 1997). Institutional modifications that result in such reductions are increasingly seen as fundamental to sustained growth and productivity.

Empirical research on these issues continues. The results point to some of the facts that need to be considered as part of the multidimensional task of improving productivity. In an African context, studies of growth have highlighted the effects on productivity (and growth) of the various interactions of demography, health, economic policy, institutions, infrastructure, and openness to trade (Radelet *et al* 1997; Stryker 1997; AsDB 1997; Sachs and Warner 1997; Easterly and Levine 1997; Calamitsis, Basu and Ghura 1999). Of direct relevance to the present study is that this work has identified a number of reasons why productivity has lagged across Africa. Indeed, since the basic factors (labor and capital) have continued to increase in most African countries over the last three decades, the decline in real per capita income that many countries have experienced is entirely due to a decline in productivity. The challenge is to determine how this trend can be arrested and reversed.

3. Economic Growth in Sub-Saharan Africa

a. Historical Performance

A review of Africa's economic growth over the last half century provides some interesting contrasts. Overall growth rates from the end of WWII until the mid-1960's and for some countries to the early 1970s were impressive. Some of this growth was accounted for by improved productivity. The most notable increases were in agriculture, mining and manufacturing. From the early 1970s, however, Africa's overall economic performance deteriorated sharply. Zambia's performance provides a dramatic illustration of the contrast. From 1945 to 1965, real GDP per capita grew at an average rate of 6.6% per year. From 1965-1991, the value was -2.2%. For the whole period, 1945-1991, the growth rate was 1% per annum (McPherson 1980 Chapter II Table 3; IMF 1992:758-759). Moreover, despite a number of reforms in Zambia since 1991 (including the restoration of multiparty democracy), economic performance has not improved. Between 1992 and 1998, per capita real income declined by more than 2 percent per year.

The data in Tables 1 and 2 invite some broader comparisons. Table 1 has estimates of GDP for selected countries between 1965 and 1998. These data show that in the mid-1960s many African countries had income levels similar to other developing countries. But, by the mid-1990s the divergence in income levels was pronounced. For example, in 1965 Singapore and Zambia had roughly the same overall GDP. By 1998, Singapore's GDP was around 25 times that of Zambia's. The situation is similar in the case of South Korea, as evident in Table 2, which contains per capita incomes. Zambia's per capita income in 1965 exceeded that of South Korea. By 1998, South Korea's per capita income, despite the major losses associated with the Asian crisis of 1997, was more than 17 times that of Zambia's. In 1965, the GDP of South Africa was 38 percent of the total GDP of SSA. By 1995, that share had increased to 46 percent. This is just another way of stating the widely asserted fact that after almost four decades of "development" the

poorest countries in SSA are now relatively and (in many cases) absolutely worse off than they were when decolonization began.

Perhaps the most striking measure of economic regression is the change in relative income shares. In 1965, SSA's share of world income was 1.3 percent. In 1980, it was 2.7 percent (inflated perhaps by generally over-valued exchange rates and bloated oil-based earnings of Nigeria). By 1995, however, the share was 1.1 percent. In the meantime, the share of world population in SSA had risen from 6 percent to 9 percent. With more population, a larger labor force, and declining income, the main implication is that average productivity had fallen.

Table 1. GDP at market prices (bill. USD)

Sub-Saharan Africa	1965	1970	1975	1980	1985	1990	1995	1997	1998
Benin	0.29	0.33	0.68	1.41	1.05	1.85	2.01	2.14	2.31
Botswana	0.05	0.10	0.41	1.11	1.41	3.63	4.97	5.34	5.69
Burkina Faso	0.37	0.40	0.83	1.71	1.43	2.76	2.35	2.38	2.58
Cameroon	0.81	1.16	2.75	6.74	8.15	11.15	7.97	9.12	8.74
Chad	0.41	0.47	0.86	1.03	0.99	1.61	1.44	1.60	1.74
Congo, Rep.	0.20	0.27	0.77	1.71	2.16	2.80	2.12	2.30	1.96
Côte d'Ivoire	0.91	1.45	3.89	10.17	6.98	10.80	9.99	10.25	11.04
Gabon	0.22	0.32	2.16	4.28	3.34	5.95	4.96	5.15	5.52
The Gambia	..	0.05	0.12	0.24	0.23	0.32	0.38	0.41	0.42
Ghana	2.05	2.21	2.81	4.45	4.50	5.89	6.46	6.88	7.50
Kenya	1.00	1.60	3.26	7.27	6.13	8.53	9.05	10.57	11.58
Madagascar	0.83	1.11	2.28	4.04	2.86	3.08	3.16	3.55	3.75
Malawi	0.23	0.29	0.61	1.24	1.13	1.80	1.46	2.52	1.69
Mali	..	0.36	0.83	1.79	1.31	2.42	2.47	2.51	2.69
Mauritius	0.23	0.22	0.66	1.13	1.08	2.64	3.97	4.17	4.20
Niger	0.67	0.65	1.05	2.51	1.44	2.48	1.88	1.85	2.05
Nigeria	5.87	12.55	27.78	64.20	28.41	28.47	28.11	39.86	41.35
Rwanda	0.15	0.22	0.57	1.16	1.72	2.58	1.33	1.86	2.08
Senegal	0.81	0.87	1.91	2.99	2.58	5.70	4.49	4.53	4.84
South Africa	11.00	17.91	36.95	80.54	57.25	112.00	151.12	147.62	133.46
Zambia	1.06	1.79	2.44	3.88	2.25	3.29	3.47	3.93	3.35
Zimbabwe	1.31	1.88	4.37	6.68	5.64	8.78	7.13	8.39	5.91

N. Africa / Middle East	1965	1970	1975	1980	1985	1990	1995	1997	1998
Egypt, Arab Republic	5.11	7.68	11.44	22.91	34.69	43.13	60.16	75.60	82.71
Jordan	0.60	0.64	1.36	3.96	5.12	4.02	6.51	6.98	7.39
Syrian Arab Republic	1.47	2.14	6.83	13.06	16.40	12.31	16.55	16.46	17.41
Tunisia	0.99	1.44	4.33	8.74	8.41	12.29	17.99	18.90	19.96

South America	1965	1970	1975	1980	1985	1990	1995	1997	1998
Argentina	28.34	31.58	52.44	76.96	88.42	141.35	258.29	292.86	298.13
Bolivia	0.97	1.09	1.44	2.75	3.12	4.87	6.72	7.97	8.59
Brazil	21.79	42.33	123.71	235.02	222.94	464.99	703.91	820.38	778.21
Chile	6.11	8.43	7.23	27.57	16.46	30.31	59.35	74.11	78.74

South East Asia	1965	1970	1975	1980	1985	1990	1995	1997	1998
Indonesia	..	9.66	32.15	78.01	87.21	114.43	202.13	215.75	94.16
Malaysia	3.13	4.20	9.71	24.49	31.20	42.77	87.34	100.20	72.49
Philippines	6.02	6.70	14.99	32.50	30.75	44.33	74.12	82.16	65.11
Singapore	0.97	1.90	5.67	11.72	17.69	36.64	83.60	95.14	84.38
South Korea	3.01	8.89	21.18	62.54	93.93	252.62	489.26	476.49	320.75

Source: World Development Indicators 2000, World Bank

Table 3 provides a more detailed picture. It reports annual growth rates in real GDP for most SSA countries for selected years from 1970 to 1997. The highest growth rates were recorded in Botswana, Lesotho, and Mauritius, with average growth over the period of 10.9, 6.0, and 5.3 percent per annum, respectively. The lowest growth rates (among the countries that avoided civil wars or major disruptions) were in Central African Republic, Niger, and Madagascar, all of which grew by less than 1.5 percent per annum over the twenty-five year period.

Throughout Africa, few countries recorded sustained increases in per capita real incomes. Only six countries had growth rates in excess of 4 percent per annum. Between 1970 and 1995, the working age population increased at rates close to 2.6 percent per annum. Since average investment rates in SSA over the same period were around 20.2 percent of GDP (World Bank 1997), the potential existed for real capital per worker to be maintained. This, however, would have required the capital-output ratio to remain at levels below 6.5. But, as shown in Table 4 below, these ratios were much higher. Viewed in these terms, the decline in income was largely due to a collapse in productivity. Development economists often refer to the 1980s as Africa's "lost decade." In fact, most African countries have "lost" at least two decades. Without fundamental, sustained economic reform, the losses will continue.

Table 2. GDP per capita (in USD)

Africa	1965	1970	1975	1980	1985	1990	1995	1997	1998
Benin	123.4	125.0	223.5	405.6	258.6	389.5	367.0	370.0	387.7
Botswana	94.8	161.4	535.9	1219.9	1303.1	2844.7	3403.5	3485.1	3643.2
Burkina Faso	72.9	71.8	134.3	245.4	181.4	311.3	235.8	227.4	240.5
Cameroon	137.4	175.4	365.7	778.8	817.3	972.1	604.3	654.7	610.8
Chad	124.1	127.9	214.6	230.7	193.0	280.1	214.8	226.2	238.9
Congo, Rep.	177.2	216.7	530.1	1022.0	1124.3	1260.7	826.3	850.9	704.6
Cote d'Ivoire	201.7	262.7	576.4	1241.7	706.4	927.9	738.6	721.4	761.9
Gabon	454.2	639.4	3638.3	6192.8	4098.1	6200.3	4516.2	4469.8	4675.2
Gambia, The	..	112.7	210.2	376.1	303.0	344.5	343.8	344.6	348.4
Ghana	262.2	257.1	285.9	413.9	356.9	395.8	378.4	382.8	406.3
Kenya	102.4	139.5	237.2	436.8	308.5	362.3	332.4	369.5	395.2
Madagascar	136.7	162.1	292.0	455.5	282.3	264.9	237.6	250.6	256.9
Malawi	57.7	64.3	116.9	200.2	157.4	211.9	150.1	245.1	160.2
Mali	..	67.1	140.7	271.2	177.8	286.2	254.3	243.8	254.3
Mauritius	301.4	267.7	744.8	1171.7	1059.2	2500.0	3535.9	3635.9	3623.0
Niger	182.6	155.3	219.8	449.1	218.0	320.9	205.6	189.2	201.9
Nigeria	126.4	235.8	453.6	902.4	341.5	296.0	252.6	338.7	342.3
Rwanda	46.7	59.0	129.7	225.3	283.2	371.6	207.2	235.9	256.8
Senegal	223.1	209.1	396.6	539.2	404.5	777.6	539.4	515.0	535.0
South Africa	554.7	810.7	1494.2	2920.8	1828.7	3181.7	3862.9	3629.6	3223.5
Zambia	293.6	427.0	504.4	676.9	336.2	422.5	386.4	416.4	346.7
Zimbabwe	293.6	358.2	720.7	952.9	677.6	901.2	647.9	731.4	505.4

N. Africa / Middle East	1965	1970	1975	1980	1985	1990	1995	1997	1998
Egypt	173.9	232.4	315.2	560.6	745.8	822.4	1034.0	1252.8	1347.0
Jordan	531.7	424.1	753.1	1816.5	1936.2	1268.2	1551.4	1572.2	1620.2
Syria	276.4	342.1	917.9	1500.7	1577.7	1015.9	1172.6	1105.4	1139.7
Tunisia	214.0	280.7	771.5	1369.5	1158.1	1506.9	2008.0	2051.0	2137.7

South America	1965	1970	1975	1980	1985	1990	1995	1997	1998
Argentina	1272.0	1318.1	2013.1	2739.4	2917.6	4345.7	7429.0	8209.8	8252.8
Bolivia	258.8	257.8	302.5	513.5	529.7	740.5	905.7	1025.7	1080.1
Brazil	258.3	440.8	1143.7	1931.6	1648.7	3143.1	4417.5	5011.8	4691.6
Chile	712.3	887.3	699.0	2473.5	1366.6	2313.7	4176.4	5068.3	5312.2

South East Asia	1965	1970	1975	1980	1985	1990	1995	1997	1998
Indonesia	..	82.2	242.5	526.0	534.9	642.0	1042.0	1076.6	462.3
Malaysia	329.5	387.0	792.3	1779.3	1990.2	2350.0	4237.6	4624.5	3268.2
Philippines	188.1	178.4	347.9	672.6	562.4	708.2	1054.8	1117.4	866.1
Singapore	568.7	1015.1	2783.0	5135.0	7124.8	13544.0	27991.9	30655.3	26672.5
South Korea	105.6	278.4	600.4	1640.5	2301.9	5892.9	10873.6	10360.4	6908.2

Source: World Development Indicators 2000, World Bank

Table 3. GDP Growth in Sub-Saharan Africa, 1970-97 (annual percent) [1]

Countries	1970	1975	1980	1985	1990	1995	1997	Average 1970-97 [1]	Average 1990-97
Botswana	15.78	-1.12	14.29	7.17	5.63	3.13	6.91	**10.92**	**5.17**
Lesotho	2.18	-13.51	-2.74	9.48	4.00	9.06	8.00	**6.03**	**6.78**
Mauritius	-0.40	0.91	-10.06	6.96	7.19	4.70	5.03	**5.48**	**5.29**
Swaziland	..	13.91	10.69	3.76	8.92	2.69	3.72	**5.42**	**3.69**
Uganda	..	..	..	-3.31	6.47	11.43	5.38	**5.09**	**7.01**
Seychelles	8.87	3.18	-4.25	10.29	9.01	-0.62	4.27	**5.03**	**4.03**
Kenya	-4.66	0.88	5.59	4.30	4.19	4.41	2.07	**4.61**	**2.29**
Gabon	8.68	19.19	2.55	-2.33	5.19	6.96	4.09	**4.48**	**3.55**
Congo, Rep.	6.36	7.73	17.64	-1.19	1.00	4.00	-1.90	**4.44**	**0.93**
Malawi	0.48	6.09	0.41	4.57	5.69	14.67	5.08	**4.01**	**4.28**
Zimbabwe	22.56	-1.93	14.42	6.94	6.98	-0.65	3.23	**3.92**	**2.55**
The Gambia	6.15	12.39	6.27	-0.81	3.56	0.88	5.40	**3.90**	**2.70**
Nigeria	25.01	-5.23	4.20	9.70	8.20	2.59	3.92	**3.67**	**3.76**
Cameroon	3.09	11.25	-1.97	8.06	-6.11	3.30	5.10	**3.61**	**-0.75**
Burkina Faso	0.12	3.00	0.80	8.52	-1.52	3.97	5.54	**3.37**	**3.29**
Mali	6.12	11.61	-4.33	1.26	0.43	6.37	6.67	**3.27**	**3.04**
Benin	2.10	-4.90	6.78	7.53	-1.22	4.60	5.60	**3.26**	**3.89**
Cote d'Ivoire	10.38	8.25	-10.96	4.50	-1.10	8.01	5.95	**3.24**	**2.48**
Guinea-Bissau	..	7.86	-15.96	4.17	6.10	4.40	5.00	**3.13**	**3.94**
Senegal	8.56	7.54	-3.32	3.80	3.89	4.80	5.17	**2.65**	**2.72**
Mauritania	11.99	-5.13	3.37	2.99	-1.77	4.65	4.47	**2.59**	**3.28**
Togo	2.52	2.44	14.58	5.56	-0.24	6.80	4.67	**2.44**	**1.57**
Burundi	21.33	0.70	0.99	11.78	3.50	-7.02	0.38	**2.40**	**-1.97**
Ghana	9.72	-12.43	0.47	5.09	3.33	4.02	4.20	**2.30**	**4.19**
South Africa	6.30	1.43	7.95	-2.73	-0.32	3.37	1.68	**2.27**	**1.08**
Mozambique	..	..	..	1.00	1.00	4.32	12.42	**2.15**	**4.55**
Namibia	..	..	..	-0.61	-1.24	3.38	1.76	**2.10**	**3.46**
Rwanda	6.00	-2.11	8.95	4.40	-2.40	36.60	10.90	**2.08**	**-2.85**
Chad	1.86	9.01	-6.05	15.48	-8.12	0.87	6.55	**1.80**	**3.91**
Zambia	4.80	-2.27	3.04	1.62	-0.48	-2.27	3.50	**1.34**	**1.04**
Central African Rep.	2.33	0.40	-4.48	3.93	-2.15	6.01	5.12	**1.17**	**0.64**
Niger	3.06	-2.79	-2.23	7.72	-1.28	2.65	3.36	**0.89**	**1.13**
Madagascar	5.28	1.26	0.81	1.16	3.13	1.68	3.56	**0.87**	**0.89**
Sierra Leone	8.62	1.67	4.84	-6.74	1.61	-10.00	-20.20	**-0.16**	**-5.07**
Congo, Dem. Rep.	-0.25	-4.98	2.19	0.47	-6.57	0.70	-5.70	**-1.13**	**-6.20**

Notes: [1] Average for 1970-97 or the time period covered by the data

Source: World Development Indicators 1999, World Bank

b. Macroeconomic Factors Inhibiting Productivity and Growth

There are many reasons why productivity and growth have declined across Africa. The list includes civil disruption, fluctuating commodity prices, excessive foreign debt, growing aid dependence, over-taxation of agriculture, fiscal and monetary mismanagement, lack of accountability, spread of government intervention, the decline in investment, emergence of coping and other defensive strategies, the declining quality of labor, failure of management, lack of regional cooperation, and other influences, particularly the spread of HIV/AIDS.

Civil Disruption: Economic growth has little chance in the midst of civil unrest. There have been border conflicts,[20] a variety of destructive civil wars in Chad, Sierra Leone, Nigeria, Sudan, Somalia, Uganda, Rwanda, Zimbabwe, Angola, Mozambique, Zaire/Congo, Liberia, and Ethiopia. These have dislocated and displaced large numbers of people. There have also been ethnic cleansing and genocide.[21] The disruptions in South Africa prior to the collapse of *apartheid* seriously undermined growth. More recently, the takeover of white-owned commercial farms in Zimbabwe has led to a sharp contraction of that country's economic output. All of these situations destroy the conditions needed to promote economic growth and improve productivity.

Fluctuating Commodity Prices: One dimension of economic regression experienced across Africa has been the inability of countries to move beyond their over-reliance on a limited range of primary commodity exports. For example, more than 90 percent of export revenue in both Nigeria and Uganda is derived from a single commodity – oil in the first case, coffee in the second. Such over-reliance leaves countries extremely vulnerable to shifts in the terms of trade, particularly when their governments have failed to maintain a cushion of foreign exchange reserves or borrowing capacity. The generalized overvaluation of the real exchange rate is a major problem. Despite considerable efforts to promote exchange rate reform across Africa, particularly from the mid-1980s onwards, the widespread shift to market-determined exchange rates has not achieved the real exchange rate devaluation needed to restore Africa's international competitiveness. The real exchange rate has tended to remain overvalued through a number of influences – high inflation, large foreign inflows in the form of aid, official resistance of nominal exchange rate depreciation, and declining labor productivity.

Growing Aid Dependence: In 1980, net Official Development Assistance (ODA) was approximately 6.1 percent of GDP for countries in SSA (excluding South Africa and Nigeria, both of which receive minimal support). By 1995, net ODA had risen to 12.5 percent of GDP. One explanation for the increase is that African countries "needed" more aid as their incomes declined and debt service obligations rose. An alternative explanation is that the growth of income collapsed because aid flows increased so sharply.

Donor organizations support African countries for a variety of reasons. Only some of them are directly related to economic development. Similarly, African countries have accepted aid for many reasons, only some of them related to economic development. In the process, literally billions of dollars of resources have been devoted to activities that have had no connection to improving the

welfare of the majority of Africans or raising their productivity. The lack of results throughout Africa is therefore no surprise.[22]

Over-Taxation of Agriculture: One reason for declining productivity across Africa has been the long-standing and extensive over-taxation of agriculture (Dumont 1969; Eicher and Baker 1992; Binswanger and Deininger 1997; Delgado *et al.* 1998; Binswanger and Townsend 2000). Agriculture has been overtaxed through several mechanisms: price controls, rigged (overvalued) exchange rates, pan-seasonal and pan-territorial output pricing, restrictions on the inter-market movement of agricultural products, and export controls. A further "tax" has been the disproportionate expenditure (capital and recurrent) by governments on urban areas. Although subsidies are frequently provided on fertilizer, fuel, irrigation water, and credit, these are orders of magnitude less than the implicit and explicit taxes on agricultural output. Moreover, due to political influence peddling, the incidence of these subsidies has been highly concentrated (Bates 1981; Binswanger and Deininger 1997). It is worth noting that the empirical results based on a large sample of African countries over the last three decades reported in Chapter 11 show that non-agricultural growth in Africa has occurred at the expense of agricultural growth.

Agriculture in Africa remains under major pressure and countries continue to have a food problem largely because most governments have not convinced themselves of the need for a pro-growth strategy for the sector. Most commentators expect that after three decades of sub-standard agricultural performance across the continent and a heavy reliance on commercial imports and food aid, African governments would reverse direction. This is still not the case. The case studies of Mozambique and Zambia, respectively, in Chapters 13 and 14 in this volume reinforce this point. The World Bank's *Long Term Perspectives* study showed that for economic recovery to be sustained in Africa, agricultural output should increase by around 4 percent per annum over the long term. For that growth rate to be achieved, agricultural productivity will have to rise rapidly. Since agricultural productivity is already exceedingly low in Africa, there is scope for rapid ‘catch-up.’ However, the policies that would allow agriculture to expand are lacking. One such policy would be to remove the various taxes (implicit and explicit) on the sector by adopting the measures needed to achieve and sustain a devaluation of the real exchange rate.

Fiscal and Monetary Mismanagement: Sustained improvements in productivity do not (and cannot) occur under conditions of macroeconomic instability. A major source of instability across Africa has been the cumulative effect of excess money creation, largely the result of financing budget deficits through domestic credit creation. Under normal circumstances, the chronic balance of payments deficits experienced by the oil-importing African countries in the early 1970s would have reduced the overall money supply, thereby deflating demand. In reality, the loss of reserve money was more than offset by increased domestic credit as governments financed their deficits and the losses of the SOEs by borrowing from the banking system.

Deficit financing on a temporary basis makes sense if it helps avoid major disruptions and eases the process of adjustment. What is not sensible, however, is the continued use of deficit financing in an attempt to avoid or postpone adjustment (Calamitsis, Basu and Ghura 1999). Such behavior

represents fiscal and monetary mismanagement on a major scale. Macroeconomic issues are addressed at more length in Chapter 3 of this volume.

Lack of Accountability: Fiscal and monetary mismanagement are two dimensions of the broader trends in declining accountability across Africa. The *de jure* and *de facto* disappearance of representative government soon after most African countries gained independence seriously undermined accountability. For some countries the process was relatively rapid. For others, it took time for the leaders to consolidate and extend their particular brand of personal rule (Sandbrook 1986, 1987; Ayittey 1992). In the process, economic management was subverted to the dictates of the leader or his party.[23]

A major indicator of the loss of accountability was the sharp increase in the role of deficit financing by governments throughout Africa. As pressures to restructure their economies increased, leaders either forgot or did not grasp the difference between real and finance capital.[24] Presuming that the latter could create the former, they sharply expanded the rate of borrowing (especially from domestic sources). Inflation accelerated and where the exchange rate could adjust, devaluation was dramatic. Where exchange rates were fixed, parallel ("black") markets emerged, capital flight accelerated and currency substitution became widespread. Since all of these activities reflect a general collapse of confidence, growth and productivity were adversely affected as well.

Spread of Government Intervention: One reason why governments became increasingly less prudent in their financial management was that the state as a whole became dramatically over-extended. For most African countries, this process began soon after independence. African leaders were generally anxious to ensure that political independence was accompanied by economic expansion. However, most leaders at that time did not believe that the existing economic structure (the much maligned 'colonial legacy') or the local private sectors would respond in the correct – socialist and populist – ways. It was an easy step to the conclusion that the state had to become more deeply engaged in the economy (Moore and Dunbar 1968; Crawford Young 1971; Lofchie 1971). Governments, therefore, took explicit steps to "promote economic development."

It was true that in many countries the private sector had few (highly visible) entrepreneurs, development finance was in short supply, and managerial skills were limited. African countries were not developed. That the same constraints applied to the state was generally ignored. With the support of the main donor agencies, African governments began a phase of planned development that, with few exceptions, involved the aggressive expansion of state-sponsored activity.

What had started as a broad-based attempt to plan development degenerated into a confused pattern of state interference. The outcome was that bureaucratic failures replaced market failures as the principal source of economic distortion (Killick 1976; Wolf 1979, 1988).

In practice, the development effort across Africa has been characterized by an over-extended, under-managed, and poorly coordinated set of activities guided by criteria that had little relation

to the expansion of output or the productivity of the resources involved. One result of this indiscriminate extension of government influence was that many public sector activities subtracted rather than added value. For most African countries, the civil service is a prime example. Gross over-staffing and disorganization make it virtually impossible for the civil service to fulfil its assigned tasks. For most countries, there have been too many ministries with too many administrators, all of whom have absorbed resources – vehicles, overseas travel, housing, salaries – which could be more productively used in other (non-public) activities.

The situation in SOEs is similar. Their cost to the economy (in foreign exchange) is often more than they earn. Common examples are the national airlines, national transport and bus companies, state farms, fertilizer plants and petroleum refineries. Most of them have been unable to continue operating without regular subventions or periodic re-capitalization. In many African countries, national income would be substantially higher and foreign debt would be lower if most of these organizations were shut down.[25]

The Decline in Investment: A major (initial) argument for state involvement in promoting development was that the state could raise the resources needed for the expansion of investment required to support rapid rates of growth. In practice, the opposite occurred. Investment has declined throughout Africa for several reasons. The economic difficulties associated with the oil and food shocks of the 1970s reduced the availability of resources to most governments.[26] The reduction was further compounded by the counterproductive attempts to finance the economic imbalances rather than adjust. The resulting large budget deficits absorbed national savings. Added to these were the losses incurred by SOEs. It is now widely noted that bureaucrats make poor commercial managers. Their incompetence and corruption significantly reduce national surpluses that might have been productively reinvested (McPherson and Zinnes 1992; Ayittey 1998).

Although the decline in the rate of gross investment was moderated by the relatively large increase in donor support, there was a sharp decline in the efficiency of that investment. Evidence comes from a variety of sources, particularly the World Bank.[27] One dimension for which there is little besides anecdotal evidence is corruption (Klitgaard 1988; 2000; IRIS 1996; World Bank 1997, Ch.6; Mauro 1997). Kickbacks on investment contracts typically never reach Africa. These off-the-top payments overstate the size of gross investment in Africa, thereby lowering the effective rate of investment. It also helps explain why the implicit capital-output ratio has risen in SSA since the 1970s. As Table 4 shows, over the period 1971-79, the average capital/output ratio was 10 for all of SSA and 9.7 for SSA, excluding Nigeria and South Africa. Corresponding data for 1980-1989 were 8.4 and 17.6, respectively. The early years of the 1990s showed continued deterioration, although from 1994 onwards there appeared to be some improvement, largely due to the increase in income rather than any marked increase in investment. With such a low return on capital, i.e., low productivity of capital, sustained growth is impossible.

The Emergence of Coping and Other Defensive Strategies: As the earlier discussion shows, investment has declined because of the fall in the economic "surplus." The decline has also resulted from the widespread loss of confidence by both locals and foreigners alike in the

economic prospects of most African countries. This has prompted several responses. The distortions created by government interference left potential investors with two options. They could “get on board” by aligning themselves with a state-controlled entity and take advantage of the “rents” generated by the distortions. Or, they could attempt to insulate their wealth and their activities from loss and disruption. In the former case, the associations provided specific enterprises and well-connected individuals with protection from both internal and external competition. Under these circumstances, economic success was determined more by access and bureaucratic whim than productivity.[28]

Enterprises and entrepreneurs lacking access had to find other outlets. For many, the simplest was to move their capital and themselves abroad. The ensuing capital flight from Africa was huge, particularly when judged relative to GDP. Labor emigration (discussed below) has been significant as well. Those who could not emigrate shifted into informal occupations and parallel markets. Indeed, since the early 1970s, the only source of employment growth in most African countries has been the expansion of the informal sector. These strategies, widely referred to as “coping mechanisms,” have allowed many organizations and entrepreneurs to reduce or avoid the costs of their government's economic excesses. Nonetheless, these mechanisms do not provide protection to income or wealth from the effects of economic collapse.

Table 4. Capital Output Ratios

Year	Sub-Saharan Africa				
	GDI (bill. '87 USD)	**GDP** (bill. '87 USD)	**dGDP** (bill. '87 USD)	**GDI/dGDP**	**dK/K**
1970	38.9	151.5	..	..	
1971	43.2	161.6	10.1	4.3	0.063
1972	38.9	164.7	3.1	12.4	0.019
1973	45.6	170.6	5.8	7.8	0.034
1974	57.6	183.9	13.3	4.3	0.072
1975	59.5	187.3	3.4	17.4	0.018
1976	62.1	197.1	9.8	6.4	0.050
1977	61.2	202.4	5.4	11.4	0.026
1978	53.9	205.6	3.2	17.0	0.015
1979	52.3	211.2	5.6	9.3	0.027
Avg. 71-79	**52.7**	**187.2**	**6.6**	**10.0**	**0.036**
1980	58.6	223.8	12.6	4.7	0.056
1981	65.7	224.7	0.9	73.1	0.004
1982	57.7	227.4	2.7	21.3	0.012
1983	46.7	224.6	-2.8	-16.5	-0.013
1984	47.5	228.7	4.1	11.6	0.018
1985	42.5	230.6	2.0	21.6	0.009
1986	42.6	236.4	5.8	7.3	0.025
1987	42.7	241.3	4.9	8.7	0.020
1988	44.8	257.7	16.4	2.7	0.064
1989	44.7	265.4	7.7	5.8	0.029
avg. 80-89	**49.4**	**236.1**	**5.4**	**14.0**	**0.022**
1990	41.4	268.9	3.5	12.0	0.013
1991	42.4	270.2	1.3	31.5	0.005
1992	42.9	267.5	-2.7	-15.9	-0.010
1993	40.9	269.7	2.1	19.1	0.008
1994	43.9	275.9	6.2	7.1	0.022
1995	47.8	287.2	11.3	4.2	0.039
1996	50.6	300.7	13.5	3.7	0.045
1997	50.8	310.9	10.2	5.0	0.033
1998	51.7	316.8	5.9	8.8	0.019
avg. 90-98	**45.8**	**285.3**	**5.7**	**8.4**	**0.019**

Sub-Saharan Africa excluding Nigeria and South Africa				
GDI (bill. '87 USD)	**GDP** (bill. '87 USD)	**dGDP** (bill. '87 USD)	**GDI/dGDP**	**dK/K**
18.3	80.1	..	..	
19.5	85.3	5.2	3.8	0.061
18.5	87.8	2.4	7.6	0.028
20.8	88.9	1.1	18.7	0.012
26.7	95.1	6.3	4.3	0.066
26.7	98.6	3.5	7.7	0.035
28.8	105.8	7.1	4.0	0.068
30.6	110.8	5.1	6.0	0.046
26.8	113.8	3.0	8.9	0.026
25.9	114.8	1.0	26.2	0.009
24.9	**100.1**	**3.9**	**9.7**	**0.039**
26.6	120.7	5.8	4.6	0.048
29.0	119.9	-0.8	-36.0	-0.007
29.6	124.4	4.5	6.5	0.037
25.3	125.6	1.2	21.3	0.009
24.8	126.1	0.5	49.7	0.004
25.0	128.0	1.9	13.4	0.015
25.8	133.0	5.0	5.2	0.037
24.3	135.8	2.9	8.4	0.021
24.5	146.9	11.1	2.2	0.075
24.5	150.7	3.8	6.4	0.025
25.9	**131.1**	**3.6**	**8.2**	**0.027**
24.3	152.2	1.5	16.6	0.010
23.2	154.3	2.1	10.9	0.014
22.7	152.7	-1.5	-14.7	-0.010
23.6	152.8	0.01	4155.8	0.000
24.1	155.3	2.6	9.3	0.017
26.5	163.9	8.5	3.1	0.052
28.8	172.9	9.0	3.2	0.052
30.2	180.3	7.4	4.1	0.041
31.6	186.6	6.3	5.0	0.034
26.1	**163.4**	**4.0**	**465.9**	**0.023**

Source: African Development Indicators, 1998/99, World Bank

Declining Quality of Labor: Declining standards of education across Africa have affected productivity in several ways. First, the average skill level of workers entering the labor force has declined. To deal with this, employers have often fragmented the tasks undertaken by each worker, thereby raising the costs of organization and management. Alternatively, they have provided additional training, adding further to costs. Second, because of the overall decline in economic activity, new labor force entrants have fewer opportunities for learning-by-doing.[29] Third, the decline in the average level of skills has undermined the quality of management. Fewer new entrants to the workforce have the capacity to work their way into positions of responsibility. Moreover, those who have become managers face the task of dealing with an increasingly dispirited, disorganized, and ill-equipped work force. And fourth, employers have been responding to signals that have become increasingly out of date. It has taken time for them to perceive that the quality of education has declined. This resulted in the employment of many nominally qualified but poorly trained workers. Existing union rules and employment conventions in the formal sectors prevent these workers from being laid off easily. This problem is particularly pronounced in government and SOEs where chronic over-employment and low productivity are common.

The emigration of skilled workers has resulted in large social costs, especially when the workers involved have been trained at public expense. In many cases, workers left for political reasons. They would not (or could not) tolerate the excesses of one party states and the antics of the various life presidents. Others left because their skills were rewarded better elsewhere. The latter has been most pronounced among those with special skills such as doctors, teachers, university lecturers, and accountants. Typically, it is the most productive, motivated, and innovative workers that emigrate. This has reduced the average skill level in the economy, further lowering overall labor productivity.

Failure of Management: Management is one category of labor that has been under constant pressure in Africa over the last three decades. On one level, Africa's experience can be seen as a major failure of its managers to create and sustain the conditions needed for rapid economic expansion. At another level, Africa's managers have demonstrated remarkable resilience in preventing the economic decline from becoming more severe. There is considerable evidence for the first point. Based on economic performance and progress in key social indicators, most African countries were moderately well-managed until the early 1970s. After that the situation reversed despite massive external support and the regular adoption of structural adjustment programs. Since this effort is now in its third decade, the failure of management cannot be rationalized by lack of ownership of the reforms or policy mistakes. None of the leaders directly involved in the process (well-known examples include Moi, Kaunda, Chiluba, Nyerere, Mugabe, and Mobutu) showed any willingness to learn, or to make progress. What has not yet been understood is how (or why) African leaders and senior managers continued with such obviously counter-productive approaches for so long.

The second point of view portrays African managers in a more favorable light. Given the shocks, disruptions and confused objectives, it can be argued that African leaders took the tough decisions needed to avert total collapse, though not to reform, their economies. This argument sees African

managers as being highly skilled in forestalling or defusing crises. But, crisis management does little to enhance productivity. The challenge, therefore, is to turn these crisis-averting skills to the more constructive task of raising productivity in ways that lead to sustained development.

Lack of Regional Cooperation: Estimates from the Global Coalition for Africa (1995) show that there are more than 200 regional organizations in Africa. Of those dealing with economic cooperation, none functions efficiently or effectively (GCA 1996; Radelet 1996; Gibb 1998). From the days of the Mali Federation (between Senegal and Mali) and the founding of the Organization of African Unity, when Kwame Nkrumah sought to emphasize pan-African development, much has been said and written about closer links between African countries. To date, little of practical importance has been achieved.[30] Indeed, for many years, the trend was in the opposite direction as countries sought to close themselves off from trade and exchange. This is unfortunate since regional development, especially in selected areas such as finance, infrastructure, energy, and communications, offers the prospect of helping African countries make major savings. The main advantages are from economies of scale and increased efficiency associated with standardization and simplification of procedures. The problem remains of how to gain agreement so that cooperation can become a reality.[31]

HIV/AIDS: One factor that is reducing the quality (and quantity) of labor in Africa is the spread of HIV/AIDS. In some countries of southern Africa, one adult out of four is HIV positive. Debility and death from AIDS is accelerating. There is no obvious end in sight to the epidemic. Observers who see the situation improving (Government of Zambia 1999; ING Barings 2000) base their projections on extremely flimsy evidence and dubious projection methodologies (McPherson, Hoover and Snodgrass 2000). Other specialists suggest that due to more virulent sub-types of the HIV virus, there is a "new" epidemic in Africa (Essex 1999).[32]

HIV/AIDS reduces the quality of labor in two ways. Skilled workers die, and HIV positive workers, facing the certainty of a premature death, shift the focus of their activities from productive work to survival. One factor which undermines productivity is the hesitancy of specialists in education, management, and organizational dynamics to devise new ways of sustaining (and perhaps improving) the productivity of workers who have HIV (Hoover and McPherson 1999, 2000). While attention is focused on preventing HIV and treating AIDS, the potential contribution of those who are HIV positive and, under foreseeable medical conditions who will die, has been generally ignored.[33]

Miscellaneous Influences: There are now many cross-country studies which point to a range of factors that, taken together, undermine productivity throughout Africa. One widely quoted study by Easterly and Levine (1997) found that Africa's poor growth and low productivity were associated with factors such as low schooling, political instability, under-developed financial systems, distorted foreign exchange markets, high government deficits, poor infrastructure, ethnic fractionalization, and spillovers from disturbances in neighboring countries. Other work, for example by Radelet, Sachs and Lee (1997), confirms these findings. These authors highlight the growth-detracting and productivity-reducing effects of policy distortions, lack of openness to trade and finance, weak institutions, and demographic disadvantages. They confirm earlier

findings of Sachs and Warner (1997) on the cumulative and interactive effects of a number of separate variables. Sachs and Warner's work identifies several sources of slow growth in African countries. These include initial (low) income levels, the lack of openness to trade, geographical isolation, low life expectancy, lack of central government saving, tropical influences, low institutional quality, over-dependence on natural resource exports, and the increase in the dependent population.

Many of these disadvantages are self-reinforcing. For example, budget deficits reduce the national savings rate. As savings decline, any attempt to sustain the rate of investment to stimulate growth leads to an increase in foreign debt. The high rates of inflation in the context of fixed or manipulated exchange rates lead to chronic deficits in the balance of payments and the further build up of external debt. The decline in per capita income reduces the effective demand for many commodities. This raises unit labor costs and the costs of producing and distributing key commodities, thereby leading to a contraction in the size and scope of the market. These, in turn, reduce the division of labor and lower the overall level of productivity.

These point, however, are missed by Easterly/Levine and Sachs/Warner because of the procrustean nature of their growth regressions. The feedback from the lack of growth is part of Africa's 'growth tragedy' as well as a 'source' of slow growth. This point is discussed in more detail in the context of the cross-country macro model in Chapter 11.

4. Potential Sources of Improved Productivity in Africa

With the exception of four countries – Botswana, Lesotho, Mauritius, and Swaziland – the record of productivity improvement over the last three decades in Africa has been poor. Income in most countries has grown at rates well below the increase in the labor force. In countries that have been (relatively) free of war, plunder, and civil strife, there has been some expansion of key productive factors such as labor, land, infrastructure, machinery and equipment, and working capital. Based on the growth accounting framework, this implies that there has been a sharp decline in overall productivity (i.e., output per unit of input). For countries that have experienced civil strife or war (Sierra Leone, Liberia, Chad, Sudan, Somalia, Angola, Mozambique, Zaire/Congo, Rwanda, Burundi, and Ethiopia), the basic task has been to rebuild, reconstruct, and recover. The challenge is to raise both inputs and output per unit of input. Some efforts being made have been extreme. For example, since the civil war in Mozambique ended, the flow of foreign assistance in some years has been close to and even exceeded total (measured) GDP. (These details on Mozambique may be found in Chapter 13.)

While these countries face reconstruction and revival, the tasks involved are typically more straightforward than the effort required to revitalize economies such as Zambia, Senegal, and Zimbabwe that have collapsed under the dead weight of counterproductive policies, corruption, and opportunism. In practice, it has been far easier to harness and redirect the energies of former combatants to rebuild a country (Namibia, Uganda, and Mozambique) than overcome the apathy and distrust in countries that have collapsed without having been at war. Donor representatives

regularly lament the lack of ownership of economic reform. Most African leaders have found that the strictures imposed by economic reform are inconsistent with their objectives of maintaining power. The willingness of Presidents Mandela of South Africa and Soglo of Togo to relinquish power has not been widely shared. The majority of African leaders has embraced democratic reform only to the extent that it has allowed them to gain (and keep) power.

For most African countries, economic reform has not been accompanied by the political reform needed to move the countries onto a higher growth path. The required "recovery" has yet to include the fundamental changes that every nation needs to grow and develop on a sustained basis. This is primarily the election of leaders who are committed to economic growth and development and the emergence of conditions that fosters mutual trust between a nation's leaders and its citizens.[34]

Seen from such a broad perspective, there are many challenges for countries that wish to raise their productivity. Success will require basic changes in the type of resources that are available to African countries *and* in the way that those resources are organized and used. We now turn to how that might be done.

a. Augmenting the Supply of Inputs

Historical experience shows that most technical improvements are embodied in new inputs. That is, there is little pure replacement investment. To measure the full impact of productivity, one has to examine how inputs are changing. This is especially important in situations (common to Africa) where output is declining and inputs are being withdrawn or are depreciating at a rate faster than they are being replaced. But this is getting ahead of the story.

Capital: In principle, there are several sources from which African countries can obtain additional capital. These include the government's own resources, state-owned enterprises, the donor community, and the private sector (domestic and foreign).

In practice, most African governments have limited capacity to expand their contribution to capital formation. Most governments have heavy local and external debt burdens with some having large arrears and contingent liabilities. Furthermore, most African governments continue to add to their debts by running large budget and balance of payments deficits. For the foreseeable future, these governments will need large amounts of additional grant resources (or further debt relief) simply in order to reduce their debt burdens to sustainable levels. Under present circumstances, the budgets of most African governments cannot accommodate existing expenditures on salaries, pensions, current operations, the backlog of maintenance and reconstruction and payments on arrears. The deficits are typically covered by central bank finance. Despite the talk of generalized recovery across Africa (ADB 1997; Madavo and Sarbib 1997; Camdessus 1998; Calamitsis, Basu and Ghura 1999), the medium term prospects for major improvements are not promising. Indeed, for African economies to stabilize, governments need to cut their expenditures in ways that generate substantial surpluses on a sustained basis. This is the only prospect for financing investment in a non-inflationary, non-debt-inducing way. Most African

governments are not close to this point and will not be for the foreseeable future. They will continue to lack the capacity to contribute additional resources to national investment.

With few exceptions, the donor community has reached the upper bound of its financial assistance for Africa. Some observers attribute the problem to 'donor fatigue.' In practice, however, the data show that donors are already close to or beyond the amounts that they can productively contribute to African economic revival. With net aid flows to SSA, excluding South Africa and Nigeria, well above 10 percent of GDP (World Bank 2000,Table 6.10), the limits on the efficiency of aid have been reached and often exceeded. There have been many discussions about likely reductions in aid flows as a result of shifts in donor priorities, the tightening of domestic budgets in rich countries, and the weakened influence of foreign assistance lobbies. As recent trends show, some cuts in aid have been made. Nonetheless, the reductions for SSA as a whole have not been dramatic. Indeed, with aid flows to Africa so absolutely and relatively small compared to the incomes and budgets of rich countries, it is not likely that major cuts in aid will occur. However, there is nothing to indicate that the flow of aid will increase dramatically either. With growing evidence that aid dependency has undermined economic performance across Africa, there is little room for the constructive use of additional aid (Fernholz *et al.* 1996; Berg 1996; Johnson 1997; HIID 1997; and McPherson and Gray in Chapter 9 of this volume).

State-owned enterprises throughout Africa could provide substantially more resources for capital formation if chronic loss-makers, such as national airlines, transport and bus companies, and commodity purchasing agencies were re-organized, sold, or closed down. In many countries, major improvements would occur if these enterprises were simply required to break even. This would not add to domestic savings but it would prevent SOEs from continuing to absorb domestic savings. This would require improved management, the retrenchment of redundant staff, and a rational approach to input and output pricing. On the latter point, many African governments have continued to confuse low prices with low costs. While the government may set a low price for a particular commodity (petrol, electricity, staple food, or credit) this action does nothing to lower the real resource costs of that commodity. African policy makers need to understand the practical implications of the distinction. If they wish to raise productivity, their emphasis needs to shift from price to resource cost.

The greatest potential source of new investment in Africa is the private sector (AfDB 1997; Madavo and Sarbib 1997). Yet, while macroeconomic instability persists, investor confidence will remain low and private sector investment will not recover. Foreign investment is low across Africa because few asset-holders have any incentive to invest. A crucial first step in attracting foreign capital is for African governments to create the conditions that encourage their own citizens to invest. In view of the large amounts of capital flight from Africa over the last three decades, the potential for this is large.[35] Yet, for flight capital to return and other resources to be tapped, confidence among local investors will have to rise. This requires a credible and sustained commitment to reform by government. For that to occur, governance will need to improve, the state will need to continue to disengage from commercial activities, and the prospects for extended periods of stability will need to improve.

Labor: Notwithstanding recent evidence that the rate of population growth in many African countries is slowing down, there is still considerable momentum in the growth of the labor supply (World Bank 2000, Tables 2.1, 2.3). Furthermore, due to the general drop in education standards over the last two decades, few of those entering the labor force in the medium term will have the skills needed to sharply raise average levels of productivity. Indeed, unless there are compensatory improvements in organization and management, productivity is likely to continue falling.

Some of this decline in productivity may be offset in the short-term if economic reforms result in the *effective* removal of the least productive workers in the public sector. However, since so few African countries are cutting their public sectors, any gains from this source will be small. For some time there has been the fear that public sector restructuring would create large-scale redundancies. Indeed, the World Bank and other donors have been providing resources to resettle and retrain public sector workers who were being made redundant by reform. But, the limited nature of public sector restructuring has made this source of unemployment small.

As noted earlier, the growth of real GDP has been less than the growth rate of the labor force for extended periods in many African countries. Under normal circumstances, such a change in the average product of labor would have been offset by adjustments in real wages and exchange rates. Some adjustment has occurred by not to the extent required. Unit labor costs have remained high with the result, evident in most African economies, that formal sector employment is falling, both absolutely and relatively. For some countries, such as Zambia, this decline has been underway for more than two decades. While some people who enter the labor force for the first time can find positions due to formal sector attrition (accelerated in many countries by the losses associated with HIV/AIDS), most labor force entrants have to find work in the informal sector.

Because factors in this sector are priced at or near their social opportunity costs, factor allocation is generally efficient. Yet, with overall productivity low, the potential for rapid income growth is limited. With limited income, few informal sector participants have the means to purchase the capital resources needed to help them raise their productivity (Lindauer and Valenchik 1994; World Bank 1995). That is, the informal sector provides an opportunity for expansion (i.e. growth) but at constant levels of productivity.

Within the formal sector, productivity has continued to fall. Rates of investment remain low, the quality of new workers has declined, existing workers have not been retrained as rapidly as necessary, and many skilled workers have emigrated.

The loss of skilled workers is compounded by the pattern of government intervention in the economy. In principle, many of the activities attempted by government might have potentially high social payoffs. In practice, governments have over-stepped themselves so that they have been unable to provide or generate the managerial capacity needed to ensure that their activities are operated efficiently and effectively. This has a negative effect on both the supply of inputs and on productivity.

This problem has been aggravated by widespread rent-seeking among those who have managerial responsibilities. One-party states and regimes based on the “personal rule” like those of Kaunda, Mugabe, Moi, Sekou Toure, Mobutu, Kabila, Nyerere, Siaka Stevens and many others, have never been known for their accountability. With the proliferation of state control, it is far too easy and far too attractive for many officials to use their public positions opportunistically (Szeftel 1982; Hyden 1983; Leonard 1987; Wolf 1988; Ayittey 1992, 1998). This problem has been especially destructive of growth and productivity when public resources that have been diverted to private use are transferred abroad.[36]

b. Increased Output per Unit of Input

Technology: A large part of the physical capital stock has been degraded and destroyed throughout Africa over the last two decades. This provides the potential for a surge in productivity through replacement and upgrading, should conditions improve. There are now many technological advances relevant to agriculture, industry, transport, and business services from which African countries could directly benefit. This is the so-called “late-comers” phenomenon.

Realizing this potential will require new investment (to embody the relevant technology), motivated workers with the appropriate skills, and managers who are capable of identifying the technology suited to their operations. Moreover, it will require the appropriate macroeconomic conditions, thereby ensuring that the capital, once installed, will be used at or near its capacity. At present, most African governments are unable to meet these requirements.

Moreover, the problems of limited adoption would not be eased substantially by official attempts to promote so-called “low-tech” solutions. Whether of the "small is beautiful" or "simple is optimal" type, low-tech solutions encounter problems of adoption due to high unit labor costs, lack of motivation among workers, and limited managerial capacity.

Selective technical assistance is one way of easing these problems. Expanded programs of capacity building would also help. The easiest way to overcome these constraints would be to encourage private sector operators whose decisions on the type of technology to adopt are guided by relative factor prices which are appropriate to each country's endowment. This, of course, requires appropriate macroeconomic policies.[37]

Capacity to Adjust: Studies of the changes achieved in Asian countries over the last three decades have identified the capacity to adjust as an important element supporting economic growth.[38] This quality reflects a combination of managerial, technical and entrepreneurial skills and a government commitment *not* to create and sustain growth-reducing distortions. A standard pattern (common to Japan, Korea, Taiwan, and Singapore) was that the respective governments cooperated with the leaders of major industries to anticipate which current activities would be difficult to sustain and where new opportunities for long-term investment should be pursued. A widely cited historical example is the Japanese government's decision to scale back its textile production at a time when Japan was one of the largest textile producers in the world. However, many observers question the ability of governments to ‘pick winners.’ The issue, however, is one of attitude. In

too many cases, African governments have not only picked losers, but they have continued to support them well beyond the point at which the social returns were even marginally positive. Lacking the capacity to adjust, government support has typically wasted national resources.

The problem is that few African governments have officials who are prepared to think and act strategically with respect to economic policy. This has already been noted with respect to the lack of regional cooperation. Yet, there is opportunity for that to change. At the Abuja conference in 1991, African leaders committed themselves to forming an African common market by the year 2020. Although the goals were sufficiently vague and distant to enable all participants to associate themselves with the proposal, the initiative provides a useful framework for focusing attention on the need for cooperation.

While regional action would be constructive, strategic thinking has to begin at the national level. One area that could benefit from such thinking is the relationship between African governments and the IMF and World Bank. For their part, African governments habitually complain about the overbearing and heavy-handed approaches of the Bretton Woods institutions in the area of structural adjustment and economic reform. Many assert that these programs are imposed rather than agreed. If this is the case, African governments could make a constructive start by formulating their own programs with time-bound, feasible, actions that would allow their countries to move beyond Bank/IMF support. A principal focus of senior policy makers in The Gambia in 1984 and 1985 was to "get out ahead" of the IMF and World Bank programs. Having done that through some tough policy choices and rigorous monitoring, local policy makers gained considerable room to maneuver once they moved beyond the need to always be playing catch-up (McPherson and Radelet 1995).

In the absence of strategic actions of this sort, it is idle and disingenuous for African governments to argue that adjustment has been imposed. The reality is that because governments have been unwilling and in many cases incapable of adjusting, the Bank and the Fund have been induced to frame programs that their staff believe will help. That these programs have not helped (or, as argued below, have added to the pressure on African capacity) says more about the unwillingness of African governments to adjust than the all-too-common complaints about the heavy handedness of the Fund and the Bank.[39]

An important initiative that all African governments could begin to take would be to formulate an aid and debt exit strategy. Although immediate prospects of full-scale debt relief continue to be limited,[40] the exercise would serve a number of useful purposes. Firstly, it would identify for African policy makers the type of adjustments that are required to alleviate their debt and allow them to move beyond their present over-reliance on aid. Secondly, it would help show senior technicians in the government and the aid community that with constructive changes in policy, aid and debt do not have to be permanent fixtures in Africa. And, thirdly it would help African policy makers begin to take responsibility for their own economic policies and end the *de facto* control over economic policy-making that continues to be exercised by bureaucrats in Washington, Brussels, Paris and London. The prospects for an 'aid exit' strategy are debated in Chapter 9.

Reductions in Inefficiency Most areas of economic activity in Africa could be effectively restructured to produce immediate and substantial improvements in efficiency. Obvious examples are: the continued removal of controls that distort economic incentives, comprehensive civil service and public enterprise reform, rehabilitation of the physical and social infrastructure, the closure of loss-making activities, and improved accountability that reduces waste and lowers costs.

Despite progress towards liberalization, many countries retain restrictions on international trade. Perhaps the most significant distortion is the persistent overvalued real exchange rate that is reinforced by continuing controls on trade and exchange.[41] These are costly, time-consuming, and counter-productive impositions on local business activity. Individuals and firms respond by shifting to other activities, bribing the officials who administer the controls, or reducing the flow of exports and imports. These actions represent second-best responses that waste national resources and reduce the national growth rate.

The size and inefficiency of civil services across Africa has already been noted. Based on any measure (relative to GDP, relative to national budgets, relative to total formal labor force), these services are far too large for the economic base to support. They need to be drastically cut and reorganized. Some countries have made a start, although many governments have found a pretext for backtracking. There is a dilemma. Reorganization may not directly save resources. Wages need to increase and retrenchment costs are high. Yet, restructuring would improve the overall performance of the civil service. The resources that *are* spent would be more efficiently used. The same applies to SOEs.

The rehabilitation of physical infrastructure would have an immediate payoff by reducing the operating costs for both business and government. By fixing the roads, up-grading the telecommunications system, repairing the railways and ports, weather-proofing the food storage facilities, and so on, governments and their agencies could substantially reduce their own costs and the costs to others who directly and indirectly rely on the services derived from this infrastructure.[42]

By closing loss-making enterprises, governments could increase the growth of national income by significant margins. For instance, national airlines typically lose millions of dollars every year, sometimes on the order of one or two percent of GDP. Net foreign exchange earnings and GDP would rise simply by shutting down such value-subtracting enterprises. Other operations, e.g., bus companies, petroleum companies, electricity supply companies, and grain marketing agencies also lose the equivalent of millions of dollars each year. These losses are covered by subsidies that often comprise a large share of government expenditure (World Bank 2000, Table 4.14). Continued subsidization wastes national resources and raises the risk of further economic instability.

Another area where efficiency could be improved across Africa is through action to rationalize the allocation, acquisition, and transfer of land. Although land itself does not directly contribute to economic growth, the conditions under which individuals and firms can gain access to and use

land have been a major constraint on the expansion of economic activity. Laws across Africa dealing with land issues are a jumble of legal and customary rights which reward those who are well connected and rich, and disadvantage those who are innovative and entrepreneurial. Productivity would rise if bureaucratic barriers to obtaining title to land were reduced. This would substantially reduce, if not eliminate, the effort and resources now devoted to side-payments and special deals needed to gain access to land. The effort and resources could then be devoted to more productive activities.

Accountability is a key element in the process of improving governance. Democratization has had some favorable effects, but it is proving to be inadequate in several important areas. Corruption can be pervasive in democratic systems. Improved transparency helps as well, but it is not enough either. Corrupt practices may be exposed, but the leaders or the courts may not respond and the issues may fade away, displaced by more pressing concerns. For improved governance, democracy and transparency have to be supplemented by accountability. But accountability requires leadership. This could be exercised by the Head of State, the Parliament, the judiciary, the press, or citizen groups. Yet, irrespective of how the lead is taken, the principal objective should be to end the entrenched system of getting along by going along. The goal should be to create a system in which public waste, irresponsibility, and neglect of duty at all levels are exposed *and* dealt with in ways that reduce the prospects that these practices will be repeated.

5. Enhancing Productivity in Sub-Saharan Africa

Based on the above discussion, there is unlikely to be much impetus to growth in Africa from higher levels of inputs especially over the short and medium term. The traditional sources of capital resources – donors, governments and public enterprises – are already at (and often beyond) their limits. The principal *new* source of investment is the (domestic and foreign) private sector. The response has been generally weak, largely because the incentives needed for rapid expansion of the private sector are weak. Potential investors (local and foreign) have far too many lucrative, safe investment opportunities outside Africa. For Africa to experience large, sustained increases in private investment, much more progress will be needed to ensure macroeconomic stability and improved systems of governance that expand the commitment to law and order and respect for property rights.

Nonetheless, some resources will continue to accumulate. Even though HIV/AIDS will modify the trend somewhat (particularly in Southern and Central Africa), the working age population will continue to expand. Typically, however, the majority of new entrants to the labor force will be progressively less well trained (due to continued difficulties in raising standards of education) and poorly equipped (due to the limited expansion of capital).

Nevertheless, some improvements in labor quality could occur if (and as) economic recovery takes hold. Competition among firms will improve rewards for the better-motivated workers and widespread learning-by-doing will be associated with the expansion of markets and the

accumulation of experience. Similarly, as economies continue the process of opening up, there will be some broad-based benefits attributed to learning-by-trading.

Over the medium term, however, these contributions to growth are likely to be minor relative to the potential changes available through improvements in output per unit of input, i.e., higher levels of productivity. Many possibilities exist.

Consistent Approach to Policy: A major source of instability in Africa is the mixed signals provided by government. Most governments failed to deal effectively with their economic imbalances when they emerged in the mid-1970s. This set in motion events that compounded their economic difficulties. Worse, by regularly promising to reform and then backing away, African governments gained reputations as chronic defaulters. The result has been a pattern of instability reinforced by distrust of government.

Indeed, the economic regression during the 1980s was evidence that governments had lost control of the economy. Far from improving matters, their continued interference compounded the difficulties. This led to the erosion of confidence in governments and their agencies by locals and foreigners alike. They defended themselves in a variety of ways and, as explained above, in the process undermined the prospects for rapid economic growth.

In order to return to a stable growth trajectory, alternatives to these defensive mechanisms need to emerge. The government can facilitate such a process by adopting and maintaining a consistent, prudent approach to policy formulation and implementation. As argued at length in Chapter 3 on macroeconomic management, an essential element is government restraint. Leaders have to accept that in a fiat money economy, economic stability demands self-restraint by government. A key indicator of such restraint is that the government manages the economy so as to match the real resources at its disposal (through taxes, loans, earnings, and grants) with its real expenditures. Indeed, for countries seeking an exit from debt, the condition is more stringent still. They need to run a budget surplus on a sustained basis.

The Role of the Military: There are few African countries where the military, through its direct intervention or its haunting background presence, has not had an adverse impact on economic growth. It requires a major stretch of the imagination to create scenarios in which Nigeria, Benin, Angola, Ghana, Uganda, and scores of other countries have been made better off because of the actions of their military regimes over the last thirty years. Even in countries like Zambia which has a record of stable civilian rule free of successful military coups, there is widespread evidence that the military has had a significant role in stifling criticism of the Kaunda and Chiluba regimes.[43] The Truth and Reconciliation Commission in South Africa exposed the widespread use by the government of extra-legal means to control, discredit and otherwise nullify the impact of its opponents. No doubt, similar patterns of abuse would emerge in other African countries were such commissions to be assembled there.[44]

For African countries to move forward, their military establishments have to be removed from government. Given the hostilities and lingering animosities among different groups both within

and across borders throughout the continent, this will not be easy. Nonetheless, there is now a long history of countries that have successfully made the transition, especially the core nations of Europe following World War II.

As African countries democratize, there is an opportunity to rationalize and diminish the role of the military in their societies. No country is likely to disarm. However, many countries can create a situation where the military has a minimal claim on national resources so that the presence of the military does not act as a drag on growth.

Finding a Constructive Role of Multi-Nationals: A major thrust in the literature is that African countries have to take steps needed to attract foreign direct investment (AfDB 1997; Madavo and Sarbib 1997; Camdessus 1998). The irony of the recent change in the attitude by African leaders towards multinational enterprises and foreign direct investment is that many of Africa's early leaders (for example, Kenneth Kaunda and Julius Nyerere) were so outspoken in their opposition to what they perceived as foreign exploiters that many legitimate, productive, foreign-owned companies were either forced out or left. Without the benefits of new technology, innovation, and profit-oriented management, the results were predictable. The economies declined.[45] Overcoming such deep-rooted hostility is not easy, particularly when many African politicians can still gain attention by arguing that privatization is selling the national jewels to foreigners. In this respect, the IMF and World Bank have had little to offer, since they are frequently portrayed as stooges for foreign enterprises.[46]

By far the most important inducement for foreign investors is the widespread expansion of investment by locals. This is perhaps the most positive signal available to foreign investors. The reality is that multinationals will invest where there are prospects of high risk-adjusted returns. There is now widespread evidence showing that the best way to attract the multinational enterprises is to create a setting in which the currency is stable, inflation is low, levels of taxation are predictable, the threat of arbitrary changes in government policy is low, and the prospects for market expansion are high. Much has been made of the need for infrastructure to support foreign investment. That is a minor issue if the investments are profitable. Under these circumstances, the multinationals will provide much of the infrastructure themselves. This is evident in the large mining projects across Africa. Indeed, until the 1960s, much of Africa's infrastructure was provided in this way.

The basic problem facing most African governments as they seek to re-attract the multi-nationals is that there is no rush for these corporations to return. Based on the principles of option value theory, they can bide their time, especially if the prospect of policy reversal in any particular country is high (Pindyck 1991; Hubbard 1994; Severn 1996). Given the limits on local capital, most major multinationals already recognize that Africa's resources have little chance of being developed until they, themselves, make the necessary investments. These delays are not in the interests of African countries. The problem is that African governments have not created the conditions necessary to attract the volume of foreign investment needed to make a substantive difference.

Despite the enthusiasm among the international agencies for foreign investment as a source of revival for Africa, skepticism remains high. Most leaders need more time to get used to the idea that they are not "selling the store." In the meantime, they can recognize some of the factors that discourage foreign investors and avoid policy decisions that aggravate investors. These may not result in a major increase in foreign investment but, for the short and medium term, they will cease being a deterrent.

The Role of External Influences: Many African leaders refer to the mixed signals and outright hypocrisy of the rich countries in their dealings with Africa. There is no doubt that power politics, influence peddling, and political meddling, especially in the promotion of development fads, have all added to the problems and pressures that confront African countries. However, against all of this there is a deep-rooted desire among rich countries for African countries to prosper and grow. Indeed, much of the aid provided to Africa since the oil and food shocks of the early 1970s was motivated by such a desire. This is evident in the various initiatives taken under the Lomé Convention, the progressive modification of Paris Club procedures, the conversion of loans to grants by the major bilateral donors, and the introduction of the Special Programme for Africa. Actions by the United States (President Clinton's two trips to Africa, the passage of the Africa Growth and Opportunity Act, and USAID's Africa Trade and Investment Program) over the last several years are consistent with the willingness of all rich countries to see Africa grow and prosper. Since there are no strategic resources in Africa that cannot be obtained elsewhere, the challenge for African governments is to create conditions that are attractive and profitable for foreign operators.

While it might be useful as a local political ploy for African leaders to argue that the developed world conspires to keep Africa poor,[47] this view should not dominate practical affairs. African policy makers need to focus on what actions they can take, within the context of existing external circumstances, to promote growth and development. No African country (or group of African countries) can influence the course of political and economic events to which G8 countries respond. What should be expected, however, is that the arguments of African leaders will be heard and noted.[48] The challenge for policy is to avoid allowing adverse external events to undermine sensible domestic initiatives.

The Role of Welfare Reform: For a variety of reasons, some related to lingering colonial influences, others related to the quest for modernity and still others because of domestic political pressure, most African governments have introduced welfare programs that cannot be supported by their economy's resource base. The adoption of so-called modern labor practices and procedures has burdened most African governments with pensions, allowances, and retrenchment procedures that are unsustainable. The effects have been to raise unit labor costs within the formal sector of the economy, stifle labor mobility, and raise the cost of restructuring the economy.

Some African countries, notably Côte d'Ivoire and Senegal, have attempted to rationalize aspects of their welfare systems. Their success to date has been limited. This is discouraging but not unexpected. Few workers will give up their benefits readily. It may be futile attempting to cut the existing benefits. The best hope for the future may be for governments to contain the damage.

This can be done by ensuring that the existing benefits are not provided to broader groups of workers.[49]

Agriculture: There can be no sustained growth and no significant improvement in productivity without the broad-based, continued improvement of agriculture across Africa. Although this has been said for many years and in many ways, African economies cannot move forward on a sustained basis without agricultural expansion. In this respect, it has been disappointing to watch the "new" poverty reduction and growth strategies promoted by the IMF unfold with agriculture being treated (as usual) as a peripheral activity. The experience of the last four decades in Africa is clear: poverty reduction is impossible without agricultural development. A renewed emphasis on agriculture would cut across a range of development issues – economic growth itself, the role and status of women, the rational development of urban areas, and regional development and integration.

One of the ironies of African development is that the crucial role of agricultural growth for sustained economic development has been widely noted throughout the years. We need only recall that the World Bank's *Long Term Perspective Study* in 1990 argued that sustained improvements in per capita incomes in Africa would not be possible without expansion of agriculture approaching 4 percent per annum. Events in the decade since the publication of that study have simply confirmed the prediction that such high growth rates are not possible under current conditions. Agriculture in Africa has increased by nowhere near that rate, leading to a continued slide in overall growth and development. The *World Development Indicators* (2000, Table 4.1) show that agricultural output across SSA over the period 1990 to 1998 increased by 2.4 percent per annum. This was less than average population growth rate, implying that per capita agricultural output continued to decline (even if marginally).

This loss of ground has important negative implications for the economic status of women, food security, the re-allocation of populations across regions, the increase in urban poverty, and the overall expansion of the non-agricultural sector. If African countries are to generate the dynamism needed for both future growth and development, agricultural output has to increase rapidly, and agricultural productivity has to expand.

How will that occur? Extensive research by the World Bank, the International Food Policy Research Institute and other members of the Consultative Group for International Agricultural Research, among others, has shown that a combination of market liberalization, improved infrastructure, and technological practices developed specifically for resource poor, small farmers is required.[50] Such strategies seek to strengthen the agricultural sector from the village up. They focus directly on the contribution of women and the factors that constrain their activities. They directly address the problems of insecurity, lack of access to productive resources, and the constraints imposed by high transport costs and isolation. They also attempt to deal with the problems created by food insecurity.

None of these elements promises dramatic improvements in productivity and output. They do, however, offer the prospect of steady sustained improvements. The intention is to strengthen rural

growth linkages and deepen the links of all producers to the national economy. In broad terms, the goal is to reverse the pattern, evident in the results reported in Chapter 11, whereby non-agricultural growth has occurred at the expense of agricultural growth. For sustained growth and development across Africa, growth in agriculture needs to complement non-agricultural growth. This, however, will only become a reality when African governments and focus their policies on agriculture itself.

6. Concluding Observations

For African countries to generate the conditions that will support sustained growth and development, enduring improvements in productivity are essential. Over the last two decades, many African governments have formulated and begun implementing a variety of policies designed to achieve this. Productivity has been improved by economic liberalization and the spread of competition. The revival of enterprise and innovation has had a similar effect. Yet, for the continent as a whole, broad-based improvements in productivity have yet to be realized. They have been held back by uncertainty and dislocation associated with continuing macroeconomic imbalances, political instability, and frequent policy reversals.

Many observers emphasize the need for rapid increases in foreign investment throughout Africa. Without doubt, such increases will have an impact over the medium and long term. In the short term, however, recovery will need to be based on conditions that induce Africans themselves, whether they are farmers, owners of small businesses, wholesalers, retailers, or artisans, to use their existing resources more efficiently and to raise their rates of saving and investment.

In this chapter, we have sought to understand how improved productivity contributes to the overall task of restarting and sustaining growth and development. We have examined some of the factors that undermine productivity. We have also identified the opportunities that exist for making major improvements in productivity. Five points stand out.

First, macroeconomic stability and a predictable policy direction are essential to any attempt to foster sustained improvements in productivity.

Second, productivity improvements cannot persist without the type of generalized capital accumulation associated with broad-based improvements in health, education, food security, and institutions that sustain social stability. In these areas, government policies need to focus on inducing the qualitative changes that can and will be sustained.

Third, a major stimulus to both productivity and growth in Africa could be achieved relatively rapidly through concentrated efforts to reduce waste and inefficiency. An obvious place to start is the government's own operations. Key areas include reducing the cost of the civil service, rationalizing the management and operations of SOEs, eliminating rent-generating controls and restrictions, and disengaging the public sector from activities that it cannot manage honestly and

effectively. Immediate improvements in efficiency would occur if governments would simply shut all value-subtracting enterprises.

Fourth, there needs to be a renewed focus on improving management at all levels. A useful start has been made by liberalizing markets and opening African economies to competition. The costs of poor management are now less easy to disguise. Yet, to ensure that the effects of liberalization and competition filter throughout the economy, accountability and transparency has to improve, from the head of state down.

Fifth, major sustained improvements in productivity would occur across Africa if governments began emphasizing agriculture. The sector has large untapped potential. Improved productivity in agriculture would have numerous other advantages in terms of raising the incomes of women, enhancing food security, easing the pressure on urban areas, and reducing poverty.

Making progress in all of these areas will impose major strains on the capacity of most African governments. Elsewhere we have highlighted the problems created by overloaded development agendas. The five points just noted do not represent new initiatives. They are fully consistent with the types of activities identified elsewhere in this volume that are needed to promote and sustain growth and development. This is entirely appropriate. Economic development is a process that unfolds over time as governments take the steps to support (and sometimes induce) their private sectors to expand income-generating and welfare-enhancing activities.

The pursuit of growth and development in Africa offers no prizes for governments that are over-ambitious. Indeed, there is now ample evidence that the foundation for sustained growth and development is steady, cumulative progress that gradually engages all members of society in the process. African countries have now had almost three decades in which dozens of new initiatives have failed to overcome their major imbalances and reverse their general economic decline. The program we have outlined has few new elements. Rather it represents a relatively modest collection of activities that offer the opportunity of moving African countries forward if they are implemented and sustained.

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Endnotes

[1] While outsiders have regularly criticized the backsliding of African governments, it is worth noting that Africans themselves have been critical of the lack of sustained reform. The Executive Heads of the Economic Commission for Africa, the Organisation of African Unity, and the African Development Bank met in Abidjan on 9th December, 1990. Charged with reviewing the initiatives underway to revive growth across Africa, they concluded:

> We have reviewed the socioeconomic and political conditions in Africa and do express our dismay that, despite the major policies adopted by the Assembly of Heads of State and Government of African countries, the socioeconomic condition in Africa has continued to deteriorate steadily. The adoption of [… several major initiatives…] did not yield the expected results in decade of the 1980s. This stems largely from the fact that policy decisions have remained mostly unimplemented and common positions not appropriately and forcefully followed…" (Quoted in *Rural Progress* vol.10, no.1, 1991, p.1)

[2] Vaggi (1998) provides detailed definitions of productivity. Extensive explanations of economic growth may be found in Hahn (1998) and Denison (1998).

[3] Below and elsewhere in this study (*viz.* Chapter 3 on macroeconomic management), we highlight the restraints imposed by irreversibility and option values (Pindyck 1991; Hubbard 1994; Severn 1996). Investment always involves some fixed cost. When uncertainty is high, there is a positive return for waiting.

[4] The distinction made by T.W. Schultz (1957) between the "economic supply of land" and the "physical supply of land" is relevant. Inappropriate policies with respect to markets, land-use, environment, and infrastructure (among others) will constrain the former.

[5] There are many surveys including Abramovitz (1951, 1999), Hahn and Matthews (1964), Sen (1970), Mirrlees and Stern (1973), Easterly *et al.* (1992), Gould and Ruffin (1993), Solow (1994), Nelson (1996, 1997), and Jorgenson (1996).

[6] The residual has been widely discussed in the literature. Abramovitz (1962) referred to it as a "measure of our ignorance." Denison (1962; 1967) and others have devoted considerable effort to decomposing it. More recently, Jorgenson described it as a measure of "multi-factor productivity" (Jorgenson 1996).

[7] Well known studies include Kuznets (1966), Chenery and Syrquin (1975) and Syrquin and Chenery (1989). Kuznets described the systematic changes (urbanization, industrialization, and the demographic transition) that accompany modern economic growth. Chenery and Syrquin provided detailed statistical analyses of what they called "patterns of growth" that were associated with systematic changes in demand, supply, trade, and "social processes." A quick overview of changing approaches to economic growth over the last four decades can be readily traced in the six editions of Meier's *Leading Issues in Economic Development* published over the period 1965 to 1995.

[8] Sachs (1997) has a useful survey of the major issues.

[9] The USAID Assistant Administrator for Africa Vivian Lowery Derryck (1999) defined "sustainable development" as "…broad-based economic growth which aims to protect the environment, enhance human capabilities, uphold democratic values and improve the quality of life of the current generation while preserving the opportunities for future generations."

[10] The basic approach owes much to Arrow's (1962) analysis of learning-by-doing, in which the process of production itself led to improvements in productivity. It is also consistent with Hayami and Ruttan's (1985) induced innovation hypothesis, which attributes technological adoption to changing economic incentives.

[11] The neoclassical growth model treats technology as exogenous. The rate of growth changes only during the transition from a high to a low savings rate (or vice versa).

[12] Brooks (1973) argued that the dynamics of population growth and energy generation and use around the world makes it economically and technically impossible for members of a growing population to freeze development at a particular stage.

[13] Relative factor shares are derived from the coefficients of the production function. They are key data in growth accounting. Each input's contribution to output growth is estimated as the product of the growth of the input and its marginal productivity. Under constant returns to scale – the standard assumption used in growth accounting – the relative contribution of a particular input is directly related to its marginal product (Gillis *et al*. 1996).

[14] Kuznets published a series of 10 monographs in *Economic Development and Cultural Change* between 1956 and 1967 under the general title of "Quantitative aspects of the economic growth of nations". The main results are summarized in Kuznets (1966).

[15] Prices in an input-output model come from the dual of the quantity side. With appropriate data, the factors contributing to changes in these prices can be decomposed (McPherson 1980:Ch.5). Since the economic meaning of prices derived from an input-output vector is difficult to interpret when an economy is undergoing structural change, such decompositions are not common.

[16] Sachs and Warner 1997; AsDB 1997; Ghura and Grennes 1993; Ghura and Hadjimichael 1996; Radelet, Sachs and Lee 1997; Easterly and Levine 1995; Bloom and Sachs 1998; Barro 1999; Calimitsis, Basu and Ghura 1999; Basu, Calimitsis and Ghura 2000.

[17] Most investment contains some form of embodied technological improvement. In the United States, for example, replacement investment, i.e., the duplication of existing facilities, is significantly less than 10 percent of total investment.

[18] Ruttan (2000, 2001) argues that the public sector, especially in the United States, has often taken the lead in supporting research and development and providing the infrastructure needed to boost productivity and growth.

[19] The accumulation of physical capital raises output per worker. Improvements in social capital – roads, health services, telecommunications, and sanitation – lower the costs of both private and public sector activities. The accumulation of human capital, including improvements in managerial and administrative capacities, raises efficiency. Finally, the accumulation of intellectual capital, primarily through investment in research and development, spurs innovation and technological improvements. These provide the basis for future growth.

[20] These are many examples: Burkina Faso and Mali, Senegal and Mauritania, Senegal and Guinea Bissau, Cameroon and Nigeria, and Eritrea and Ethiopia. All have been disruptive diverting scarce resources from other potentially productive uses. Moreover, all have added to the uncertainty of those who might otherwise have been induced to invest.

[21] During the last months of 2000, there was a resurgence of ethnic strife in Burundi and Rwanda.

[22] Burnside and Dollar (2000), in a widely-cited study, show that the direct effect of aid on growth in a large cross country sample was not significantly different from zero. Their study has been used to reinforce the message that aid only works in a conducive policy environment. Orme also showed this in his 1995 study.

[23] So far, there have been no women leaders in modern Africa.

[24] The confusion is common, derived from a failure to understand that sustained economic growth requires real savings, not just finance.

[25] Chapter 14 gives the example of Zambia Airways which, in the last three years of its operations, lost around $100 million. When the government finally shut the airline, GDP increased and external debt declined.

[26] Some of these changes were massive. For example, in Zambia, the current account deficit on the balance of payments as a percent of GDP worsened by 29.8% from 1974 to 1975 and the budget deficit worsened by 24.9% of GDP. The combined change in both deficits was $1.36 billion, or 55% of GDP (Data are from *African Development Indicators* 1996).

[27] Collier and Gunning (1999) provide several references to World Bank studies.

[28] Szeftel (1982) describes the political dimensions of graft in Zambia. This pattern of behavior has been widely repeated. It is one reason why "bureaucrats in business" have such a poor record (World Bank 1995).

[29] Solow (1997) has an excellent discussion of the consequences of higher levels of investment for this "endogenous" aspect of growth.

[30] Whether it represents progress will only become clear over time, but on 31st October, 2000, COMESA (the Common Market for East and Southern Africa) formally adopted a common external tariff thereby, in principle, creating a free trade area.

[31] One model that is emerging is broad-based regional cooperation in infrastructure development. A major collaborative research effort between Purdue University and several research centers in Southern Africa sponsored by EAGER/Trade Regimes and Growth examined ways of improving the efficiency of the Southern African Power Pool. This approach provides a potential model for future regional cooperation.

[32] The most recent report from UNAIDS (December 2000) available from the web site (www.unaids.org) provides sober reading. While the epidemic in some African countries appear to have "topped out" with more than 25 percent of the adult population infected and rates of infection of girls 14-19 years falling, the epidemic has been gaining a foot-hold in parts of Asia, Russia, and Latin America.

[33] An example from Kenya illustrates the point. The daily newspaper, *The Nation*, carried a report during the week of November 26th 2000 that 75 percent of the deaths of the approximately 1050 police officers who had died during 1999 were AIDS related. This datum raises questions about the problems of motivating, managing, disciplining, and otherwise dealing with the large number of police officers who know (or suspect) they are HIV-positive and know they will die.

[34] A common factor among most of the post-independence leaders in Africa – Kaunda, Nyerere, Banda, Mobutu, Moi, among others – has been their fundamental distrust of their own people. Much elaborate machinery (one-party states, "special forces," and paramilitary units) was erected in large part to ensure that the leaders would remain unchallenged.

[35] Referring to Latin America, Walter Wriston, former CEO of Citibank, asked if locals will not invest in their own economies, why should foreigners? That sentiment applies with equal force to Africa.

[36] On the issue of corruption there has been a major divergence between African countries that have stagnated and Asian countries that have grown rapidly. Corruption is no less a reality in Asia than in Africa. In Asia, resources generated by corrupt means have been largely reinvested locally. In Africa, by contrast, those resources almost invariably have been sent abroad. Asian-style corruption leads to the transfer of wealth without a major reduction in growth potential. African corruption leads to both.

[37] Barrett and Carter (1999) argue that macroeconomic liberalization alone does not promote reform. They correctly note that there are various "filters" through which the macroeconomic changes have to pass before they influence the (meso-) and micro-economic behavior of the firms and individuals whose responses are critical to the success of the reform. How the relevant effects are filtered, blocked or otherwise transformed is discussed elsewhere in this section. The basic point is that without macroeconomic reform, no amount of appropriate microeconomic responses will suffice. This has been an important lesson from the "coping" literature discussed further in the text.

[38] This point has been confirmed in "patterns of growth" studies. As Chenery (1979:44) noted "... success in sustaining relatively high rates of growth has depended more on an ability to modify trade and investment policies in the light of results achieved than on the initial choice of [development] strategy".

[39] References giving examples from Zambia include Gulhati (1989), West (1992), and Bates and Collier (1993).

[40] The point remains valid even though the *Financial Times* (December 22, 2000, p.4) recently reported that the World Bank and IMF were rushing to "introduce special debt relief" to at least 20 countries, many of them in Africa.

[41] These issues have been addressed in a companion EAGER/Trade Regimes and Growth volume (McPherson 2000).

[42] Cycles of asset destruction are common in Africa. For instance, because the roads are in disrepair, government vehicles depreciate more rapidly than normal. This raises maintenance and replacement costs, which limits the resources available to repair the roads. The poor state of roads also increases the time taken by all employees to travel to and from work, thereby diverting time from potentially more productive tasks. The poor state of the telecommunications system has led many firms to abandon attempts to communicate by telephone or fax. Messages are often hand-carried. This is expensive for society, adds to the delays in communicating, and increases the pressure on the road system.

[43] Evidence provided to the Munyama Commission on Human Rights in Zambia suggested that the Kaunda regime made liberal use of the Special Forces to suppress opposition to his one-party state.

[44] It is noteworthy that Nigeria has embarked on a similar exercise as a means of openly discussing the abuses of its military rulers.

[45] This outcome reconfirms a point made by Joan Robinson that the only thing worse than being exploited by a capitalist is not being exploited at all.

[46] In his long-running and destructive debate about whether HIV causes AIDS, President Mbeki of South Africa accused the United States' Central Intelligence Agency of being involved in promoting the use of the drug AZT so as to raise the profits of the big pharmaceutical companies. (BBC News, 6th October, 2000 available at www.bbc.co.uk).

[47] This was a prominent theme of African leaders at the United Nations' Millenium Summit in July 2000 in New York.

[48] This opportunity was missed by most African leaders at the Millenium Summit. Rather than acknowledging that there had been difficulties in the past, and that their people were ready to accept the challenges of the new decade/century/millenium, most African leaders chose to look backwards, berating the West for its colonial exploitation, lack of aid, and dominant position in international markets. Perhaps the most cogent indication of the irrelevance of this message was the widespread media coverage given to President Jammeh of The Gambia, a corrupt puppet of Libyan leader Ghaddafi. For Africa, the Summit was a public relations disaster. It largely confirmed the stinging assessment by the *Economist* in May 2000 that Africa was a "hopeless continent."

[49] Zambia provides an example. According to the law, the government has to pay a retrenched civil servant approximately 10 years' salary, two-thirds of which can be claimed immediately in cash. One way of avoiding the high immediate cost to the government would be to keep workers on the payroll but reassigning them to an entity that is attached to but outside mainstream of government activity. In this way, these workers would be made internally redundant but the expense of providing the up-front payments would be avoided.

[50] Lele 1981; Gakou 1987; Eicher 1992; Eicher and Baker 1992; Goldman 1994; Brown and Haddad 1994; Delgado 1995; World Bank 1995, 1997, 1998, 1999; Binswanger and Deininger 1997; Delgado *et al.* 1998; Mellor 1998, 2000; Hazell 1999; Johnson and Evenson 2000

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